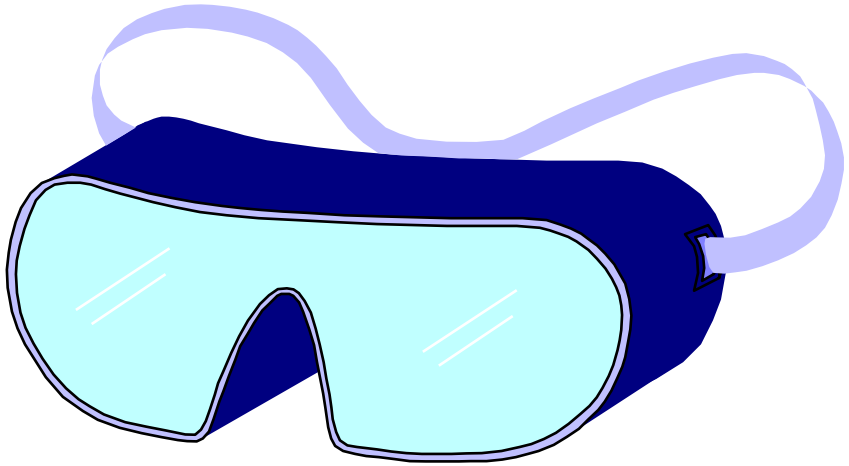
PERSONAL PROTECTIVE EQUIPMENT PROGRAM

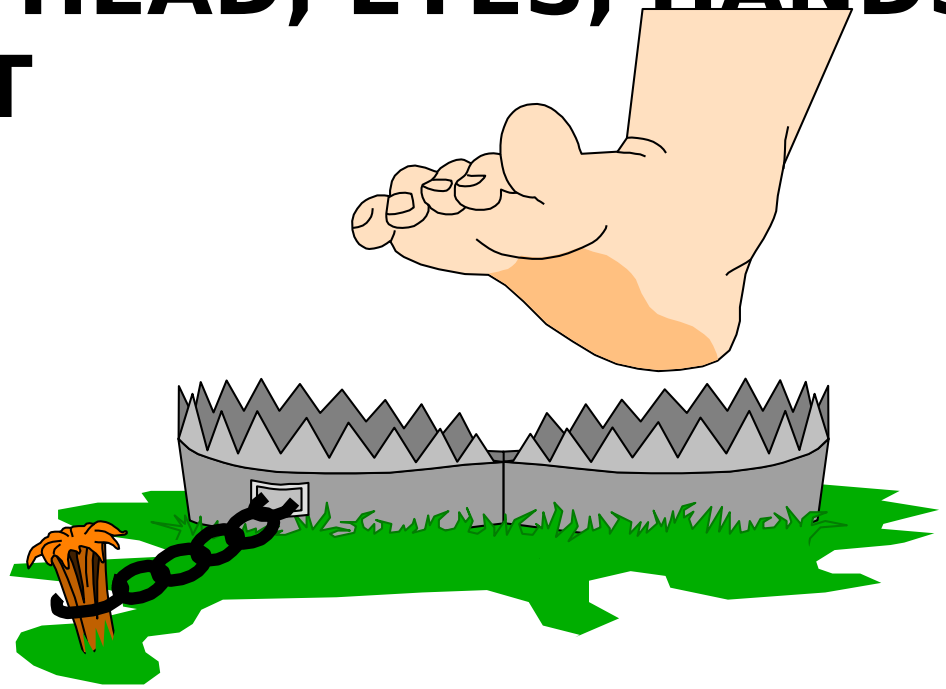


INTRODUCTION

- **NEARLY TWO MILLION PEOPLE ARE EXPECTED TO RECEIVE DISABLING WORK-RELATED INJURIES THIS YEAR**

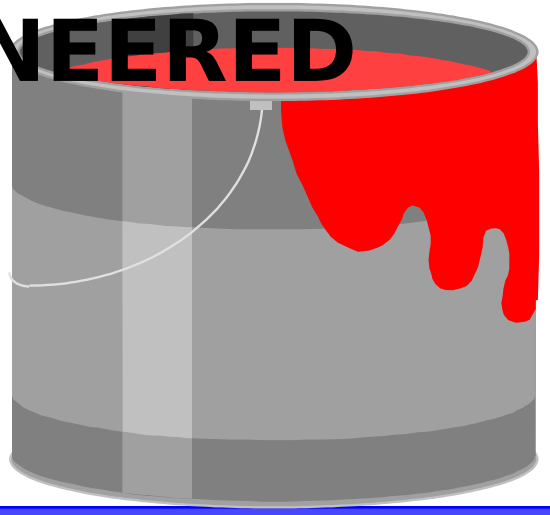
INTRODUCTION

- **MORE THAN ONE-FOURTH OF THESE INJURIES WILL INVOLVE THE HEAD, EYES, HANDS, OR FEET**



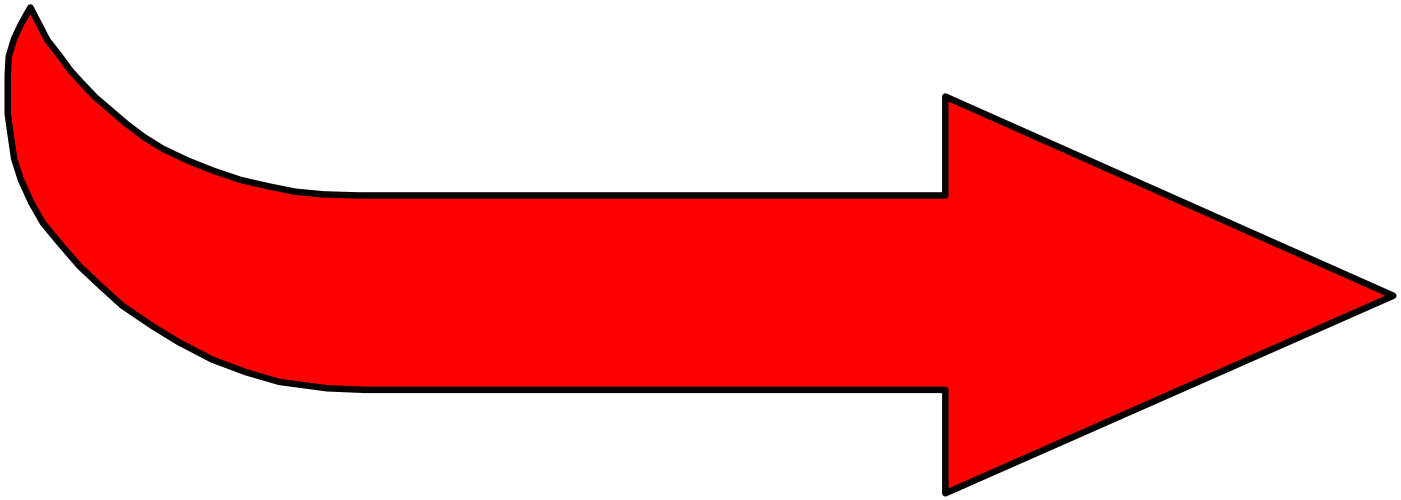
PERSONAL PROTECTIVE EQUIPMENT DESIGN:

- PPE IS DESIGNED TO PROTECT THE WORKER FROM HEALTH AND SAFETY HAZARDS THAT CANNOT BE REMOVED OR ENGINEERED OUT OF THE WORK ENVIRONMENT



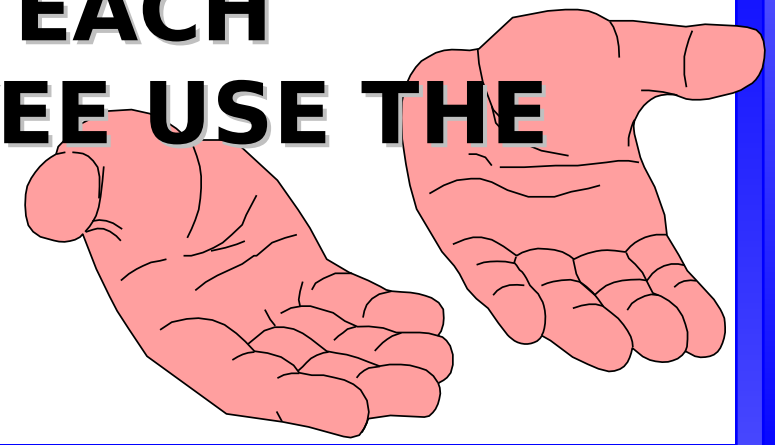
MARINE CORPS OSH POLICY :

PPE TO BE PROVIDED USED AND MAINTAINED IN A SANITARY CONDITION



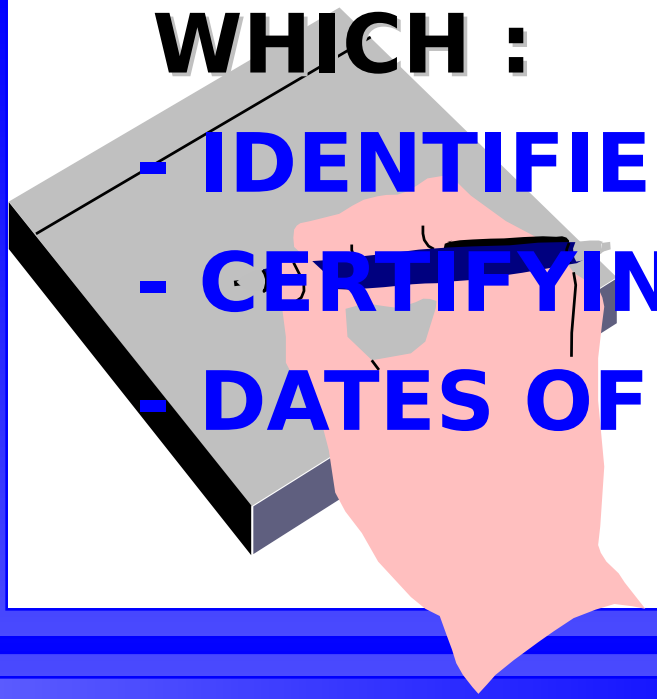
BASIC PROGRAM REQUIREMENTS:

- ACTIVITIES SHALL ASSESS WORK AREAS TO DETERMINE HAZARDS WHICH NECESSITATE THE USE OF PPE
- SELECT, AND HAVE EACH AFFECTED EMPLOYEE USE THE TYPES REQUIRED



BASIC PROGRAM REQUIREMENTS CON'T

- COMMUNICATE SELECTIONS TO AFFECTED EMPLOYEES
- PROVIDE WRITTEN CERTIFICATION WHICH :
  - IDENTIFIES WORKPLACE
  - CERTIFYING PERSON
  - DATES OF CERTIFICATION



BASIC PROGRAM REQUIREMENTS CON'T

- **ASSESSMENT GUIDELINES:**

  - **SURVEY**

CONSIDERATION SHOULD BE GIVEN TO THE BASIC HAZARD CATEGORIES:

- IMPACT
- PENETRATION
- COMPRESSION
- LIGHT (OPTICAL) RADIATION
- CHEMICAL
- HEAT
- HARMFUL DUST

SOURCES:

- MOTION
- HIGH TEMPERATURE
- TYPES OF CHEMICAL EXPOSURES
- HARMFUL DUST
- LIGHT RADIATION
- FALLING OBJECTS
- SHARP OBJECTS
- ROLLING OR PINCHING OBJECTS
- LAYOUT OF WORKPLACE
- ELECTRICAL HAZARDS
- REVIEW ACCIDENT/MISHAP DATA TO HELP IDENTIFY PROBLEM AREA

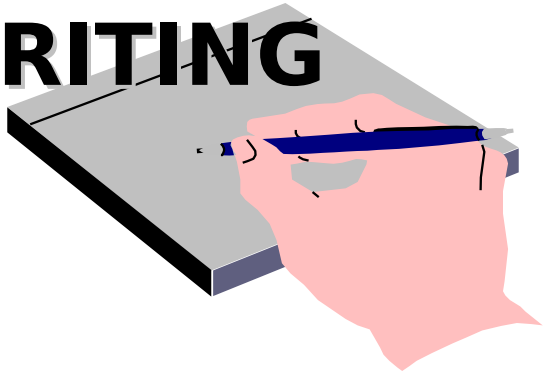
HAZARD ASSESSMENT

- **ONCE HAZARD ASSESSMENT HAS BEEN CONDUCTED, EMPLOYEES WILL BE TRAINED IN:**

  - WHEN TO WEAR PPE
  - WHAT PPE TO WEAR
  - HOW TO WEAR PPE
  - LIMITATIONS OF PPE
  - PROPER CARE, MAINTENANCE, USEFUL LIFE AND DISPOSAL OF PPE

HAZARD ASSESSMENT CON'T

- ONCE PERSONNEL HAVE DEMONSTRATED AN UNDERSTANDING OF TRAINING, VERIFICATION OF CERTIFICATION WILL BE PROVIDED IN WRITING



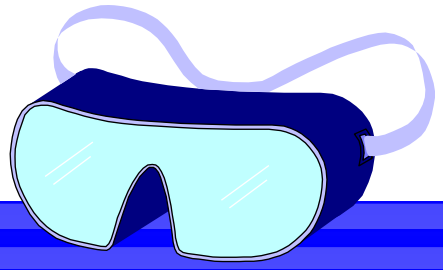
HAZARD ASSESSMENT CON'T

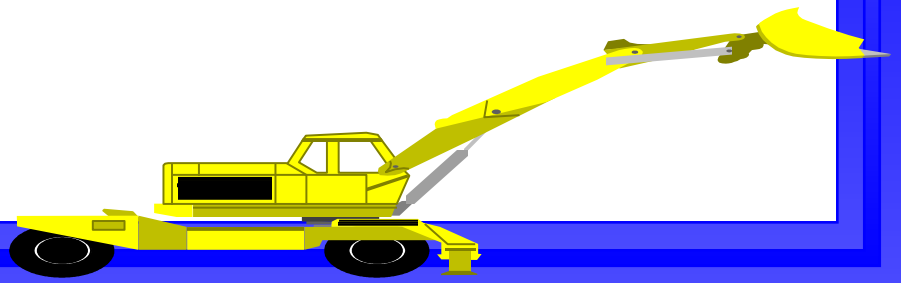
RETRAINING:

WILL BE PERFORMED IF PERSONNEL DO NOT UNDERSTAND THE TRAINING POINTS DESCRIBED OR IF PPE REQUIREMENTS CHANGE

EQUIPMENT SPECIFICATIONS AND REQUIREMENTS

- **ALL PPE AND EQUIPMENT SHALL MEET THE MINIMUM APPROVAL OF:** – FEDERAL SPECIFICATIONS
  - ANSI STANDARDS
  - UNDERWRITER'S LABORATORIES (UL), FACTORY MUTUAL(FM), AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM)





EYE AND FACE ROTECTION

- APPROVED EYE AND FACE PROTECTION SHALL BE WORN WHEN THERE IS REASONABLE PROBABILITY THAT AN INJURY CAN BE PREVENTED OR REDUCED BY WEARING SUCH EQUIPMENT

SAFETY EYEWEAR BASIC COVERAGE

TYPES OF EYE AND FACE PROTECTION INCLUDE:

- **SAFETY GLASSES**
- **GOGGLES**
- **FACE SHIELDS**
- **WELDING HELMETS**
- **FULL HOODS**

- **SAFETY GLASSES OR GOGGLES SHALL BE WORN UNDER FACE SHIELDS AND WELDING HELMETS FOR ADDED PROTECTION**

SAFETY EYEWEAR
CON'T

- TINTED OR SHADED LENSES MAY BE NEEDED FOR PROTECTION AGAINST GLARE
- TINTED OR SHADED LENSES MAY LIMIT YOUR VISION WHEN MOVING FROM BRIGHT TO DIM AREAS
- SPECIALLY NUMBERED LENS ARE PROVIDED FOR PROTECTION OF RADIANT ENERGY(WELDING ETC.)

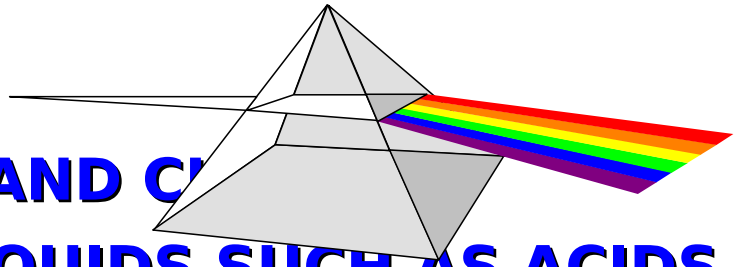
SAFETY EYEWEAR CON'T

- PRESCRIPTION LENSES PRESENT SPECIFIC HAZARDS SUCH AS:
  - DUST CAUGHT UNDER THE LENS
  - CHEMICAL REACTION WITH CONTACTS
- IF PRESCRIPTION GLASSES ARE WORN YOU MUST WEAR:
  - GOGGLES AND/OR OTHER PROTECTIVE DEVICES DESIGNED TO FIT OVER GLASSES

  OR
  - PROTECTIVE EYEWEAR GROUND TO YOUR PRESCRIPTION

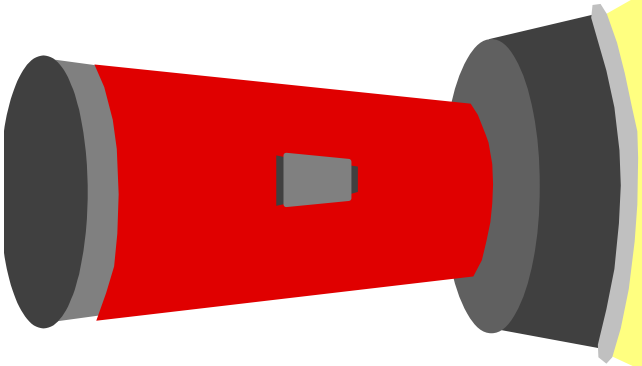
DESIGNATED EYE HAZARDOUS AREAS

- **AREAS AND PROCESSES WHICH MAY PRODUCE EYE AND FACE HAZARDS:**



  - **FLYING PARTICLES AND C**
  - **SPLASHES FROM LIQUIDS SUCH AS ACIDS, CAUSTICS AND SOLVENTS**
  - **HOT SLAG AND MOLTEN METAL**
  - **WELDING GLARE**

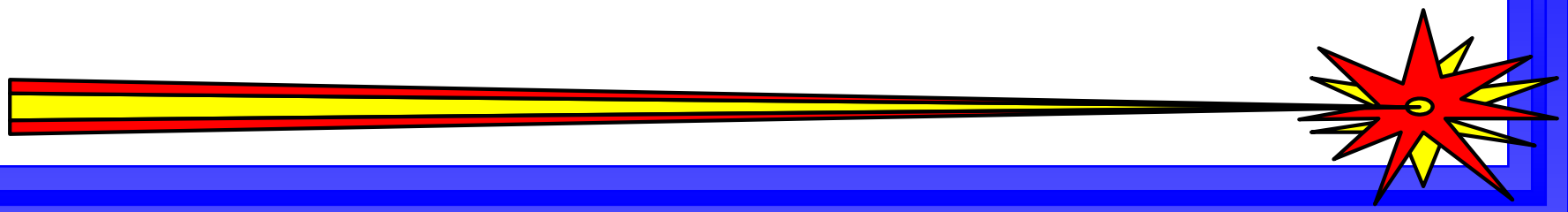
RESPONSIBILITY:



- **THE DEPARTMENT OR ACTIVITY IS RESPONSIBLE FOR PROVIDING THE REQUIRED AND APPROVED PPE AND <u>ENFORCING ITS USE</u>**

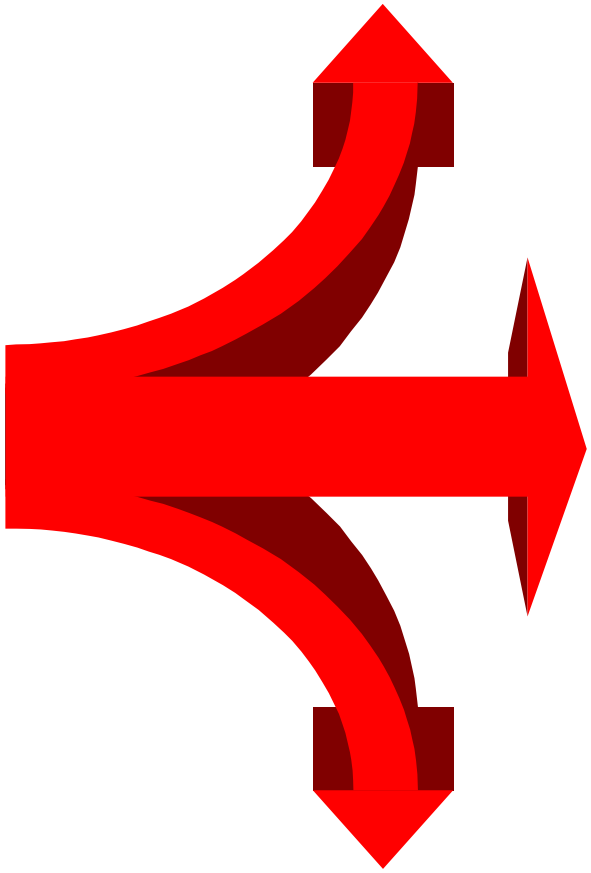
REFERENCES:

- ALL EYE AND FACE PROTECTION SHALL MEET ANSI Z87.1
- 29 CFR 1910.133
- MCO 5100.8F, CHAPTER 13



RESPIRATORY PROTECTION:

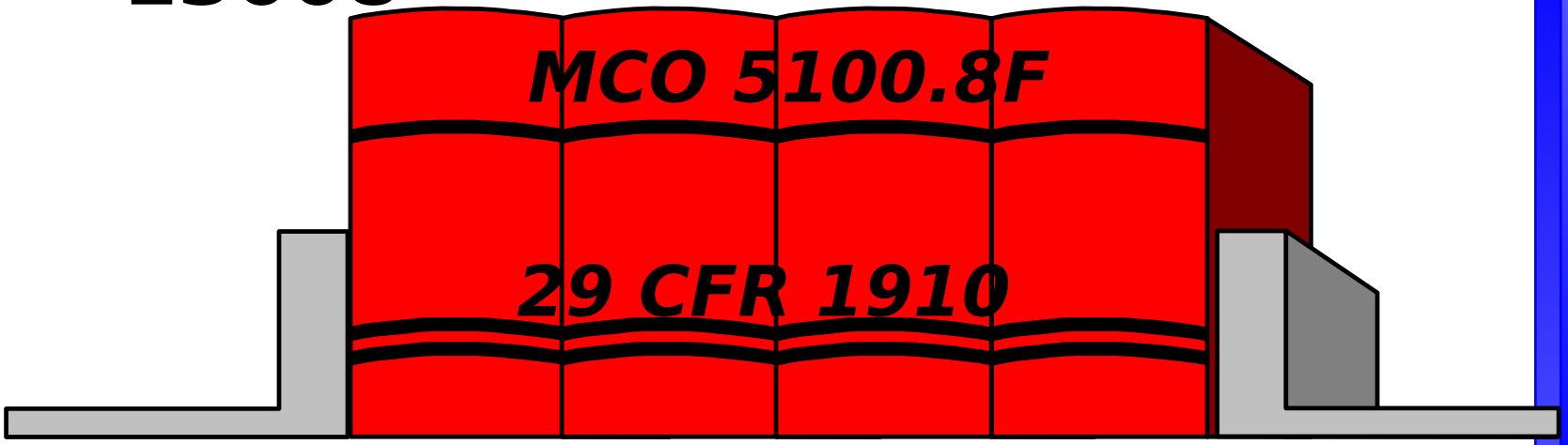
- ***HAZARDS:***



- DUSTS
- FOGS
- FUMES
- MISTS
- GASES
- SMOKE
- SPRAYS
- AND VAPORS

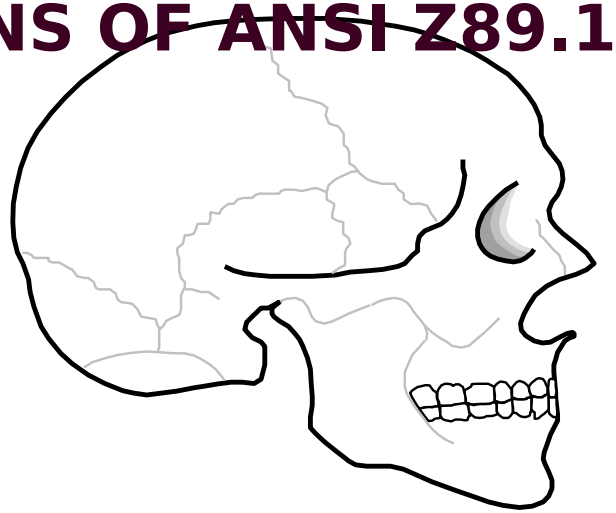
RESPIRATOR REFERENCES:

- 29 CFR 1910.134
- ANSI Z88.6
- MCO 5100.8F, CHAP 13, PARA 13008



HEAD PROTECTION:

- HELMETS AND HATS FOR THE PROTECTION OF MARINE CORPS EMPLOYEES FROM THE IMPACT OF FALLING AND FLYING OBJECTS AND FROM LIMITED ELECTRICAL SHOCK AND BURN SHALL MEET THE SPECIFICATIONS OF ANSI Z89.1 HEAD PROTECTION



HEAD PROTECTION

- SHELL IS DESIGNED TO ABSORB SOME IMPACT
- SUSPENSION MUST BE ADJUSTED SO SHELL IS 1.5 INCHES ABOVE THE HEAD
- HARD HATS ARE TESTED TO WITHSTAND IMPACT OF 8 LB WEIGHT DROPPED FROM 5 FT
- HARD HATS MUST ALSO MEET WEIGHT, FLAMMABILITY AND ELECTRICAL INSULATION STANDARDS

CLASSES OF HARD HATS

- **CLASS A:**

  PROTECTS FROM FALLING OBJECTS AND ELECTRICAL SHOCKS UP TO 2,200 VOLTS

- **CLASS B:**

  PROTECTS FROM FALLING OBJECTS AND ELECTRICAL SHOCKS UP TO 20,000 VOLTS

- **CLASS C:**

  PROTECTS FROM FALLING OBJECTS, BUT NOT DESIGNED FOR USE AROUND LIVE ELECTRICAL WIRE OR CORROSIVES

VARIOUS TYPES

- **TYPES OF PPE DISCUSSED:**
  - **HEARING AND SIGHT**
  - **FOOT**
  - **RESPIRATORY**
  - **HEAD**
  - **HAND**

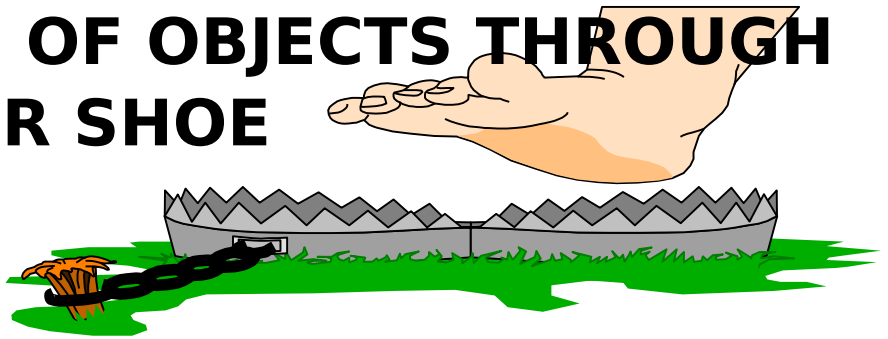
FOOT PROTECTION

- **FOOT INJURIES ARE MOST LIKELY TO OCCUR WITH:**

  - HEAVY OBJECTS FALLING ON YOUR FEET

  - ROLLING OF HEAVY OBJECTS

  - PIERCING OF OBJECTS THROUGH SOLES OF YOUR SHOE



FOOT PROTECTION
CON'T

- IF WORKING AROUND ELECTRICAL WIRES, BOOTS/SHOES MUST BE METAL FREE AND NON-CONDUCTIVE
- STATIC FREE ENVIRONMENTS REQUIRE CONDUCTIVE SHOES
- RUBBER OR SYNTHETIC FOOTWEAR MAY BE REQUIRED AROUND CHEMICALS
- AVOID LEATHER SHOES/BOOTS AROUND CORROSIVES
- FOOT GUARDS AND HEEL AND ANKLE SHIELDS MAY BE REQUIRED FOR PARTICULAR WORK

MARINE CORPS POLICY ON FOOT PROTECTION:

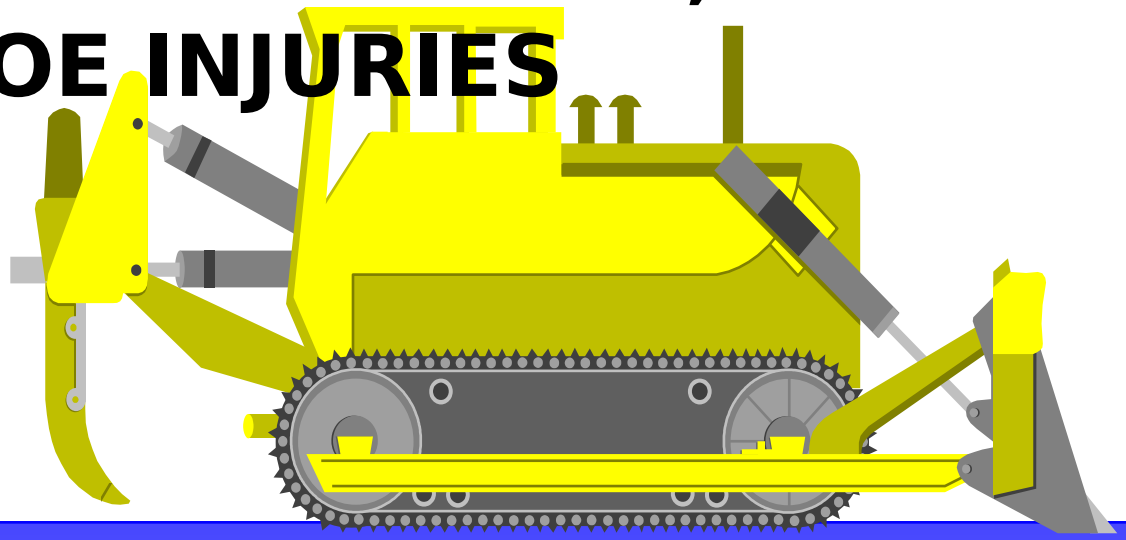
- MARINE CORPS PERSONNEL (MILITARY AND CIVILIAN) OCCUPATIONALLY EXPOSED TO FOOT AND TOE HAZARDS SHALL BE FURNISHED SAFETY /BOOTS AT GOVERNMENT EXPENSE

FOOT PROTECTION REQUIREMENTS

- ACTIVITY AND SAFETY SHALL DETERMINE FOOT HAZARDOUS AREAS AND TYPE OF FOOT/TOE PROTECTION
- FOOT AND TOE PROTECTION SHALL BE WORN AT ALL TIMES IN A DESIGNATED FOOT HAZARD AREA
- FOOT/TOE HAZARD AREAS SHALL BE PROVIDED WITH APPROVED WARNI SIGNS

FOOT HAZARDOUS OPERATIONS

- FOOT HAZARD OPERATIONS ARE THOSE WHICH HAVE A HIGH INCIDENCE OF, OR POTENTIAL FOR, FOOT OR TOE INJURIES



FOOT PROTECTIVE DEVICES

- SAFETY SHOES, WITH BUILT-IN PROTECTIVE BOX, ARE INTENDED PRIMARILY TO PROVIDE PROTECTION FROM HEAVY FALLING OR ROLLING OBJECTS

- SHOES SHALL CONFORM TO ANSI Z41 FOOT PROTECTION

- OTHER AVAILABLE SAFETY SHOES:
  - SEMI-CONDUCTIVE
  - MOLDER'S STYLE (FOR MOLTEN METALS)
  - SAFETY BOOTS
  - ELECTRICAL HAZARD (NOT TO EXCEED 600 VOLTS)

APPROPRIATION AND DISTRIBUTION:

- **MILITARY:** SHALL BE PROVIDED STANDARD STOCK SAFETY SHOES WHEN REQUIRED

  WHEN SAFETY SHOE EXHIBIT WEAR, SUCH THAT SAFETY PROTECTION IS NO LONGER AFFORDED, THE COMMAND SHALL PROVIDE STANDARD STOCK SAFETY SHOES AS ORGANIZATIONAL CLOTHING (SIMILAR TO COVERSALLS OR FOUL WEATHER GEAR)

APPROPRIATION AND DISTRIBUTION CON'T

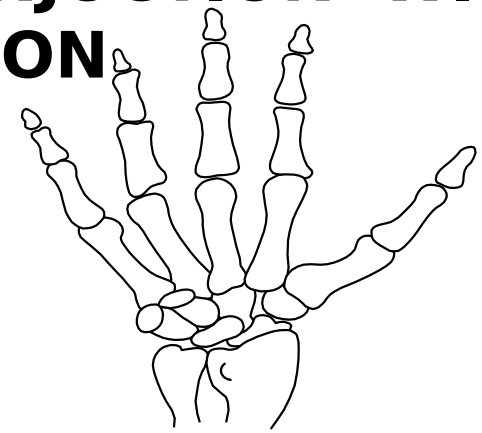
- **CIVILIANS:**
  - **ISSUED THROUGH STANDARD STOCK**
  - **REIMBURSEMENT**

  OR

  - **LOCAL PURCHASING CONTRACT**

HAND PROTECTION

- FINGERS, HANDS AND ARMS ARE INJURED MORE THAN OTHER PARTS OF THE BODY
- GLOVES ARE THE MOST COMMON PROTECTORS FOR THE HANDS
- BARRIER CREMES MAY BE USED AS HAND PROTECTION OR, IN CONJUCTION WITH OTHER HAND PROTECTION

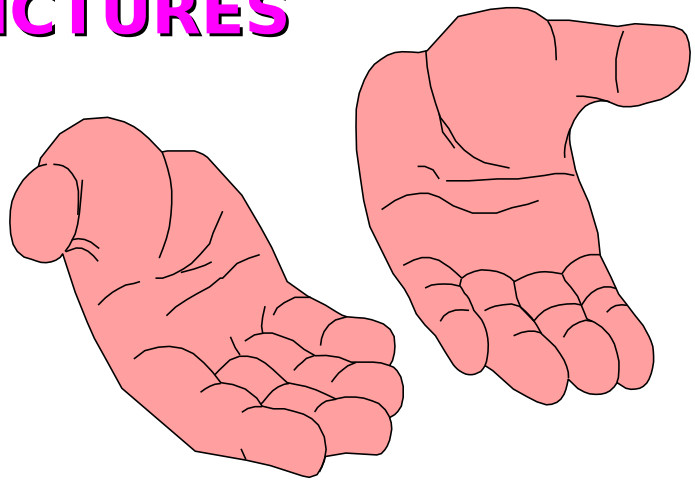


TYPES OF HAND PROTECTION

- VINYL OR NEOPRENE GLOVES ARE SUFFICIENT WHEN WORKING WITH MOST CHEMICALS
- LEATHER OR COTTON KNITTED GLOVES ARE FOR HANDLING ABRASIVES, METAL OR SHARP OBJECTS
- IT IS DANGEROUS TO WEAR GLOVES AROUND MACHINERY WITH ROTATING PARTS

HAND PROTECTION

- **HAND PROTECTION SHALL BE PROVIDED WHEN HANDS ARE EXPOSED TO SUCH HAZARDS AS:**
  - **SKIN ABSORPTION**
  - **SEVERE CUTS OR LACERATIONS**
  - **ABRASIONS AND PUNCTURES**
  - **CHEMICAL BURNS**
  - **THERMAL BURNS**
  - **TEMPERATURE EXTREMES**



HAND PROTECTION CON'T

- **SELECTION SHALL BE BASED ON:**

PERFORMANCE CHARACTERISTICS OF HAND PROTECTION RELATIVE TO

- THE TASKS TO BEPERFORMED

- CO ONS PRESENT

- DU ION OF USE

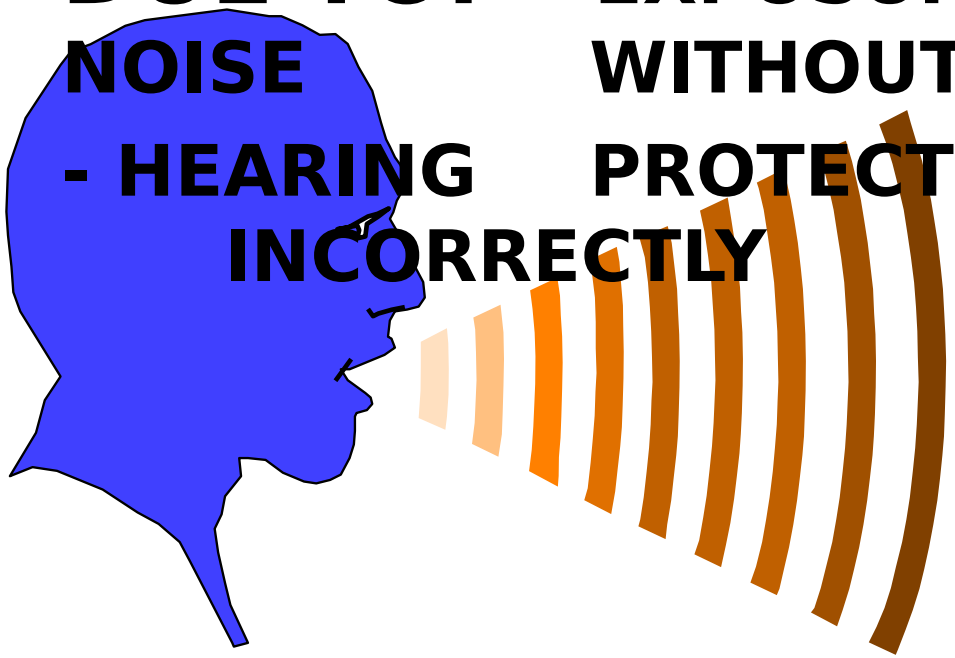
- P AL HAZARDS IDENTIFIED

HEARING PROTECTION

- HEARING LOSS IS A COMMON WORKPLACE INJURY, ALL TOO OFTEN IGNORED BECAUSE IT USUALLY HAPPENS GRADUALLY OVER A PERIOD OF TIME

HEARING PROTECTION

- **WORKERS MAY SUFFER PERMANENT HEARING LOSS DUE TO:**
  - **EXPOSURE TO LOUD NOISE WITHOUT PAIN**
  - **HEARING PROTECTION WORN INCORRECTLY**



HEARING PROTECTION REQUIRED:

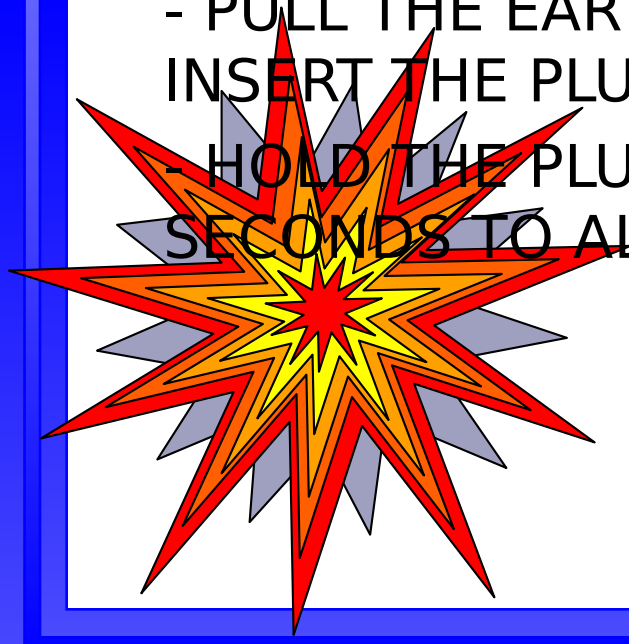
- THE SOUNDS IN YOUR WORK AREA ARE IRRITATING
- YOUR VOICE MUST BE RAISED TO BE HEARD BY SOMEONE CLOSER THAN TWO FEET AWAY
- SIGNS REQUIRING USE FOR SOUND LEVELS ABOVE 84 dbA TWA
- DOUBLE HEARING PROTECTION REQUIRED 104 dbA
- NO EXPOSURE ABOVE 140 dbA PEAK OR IMPACT

EARPLUGS

- **EARPLUGS OFFER THE MOST PROTECTION**

  TO INSERT DISPOSABLE TYPE PROPERLY:

  - ROLL PLUG INTO A SMALL DIAMETER
  - PLACE IT WELL INTO THE EAR CANAL
  - PULL THE EAR UP AND BACK AS YOU INSERT THE PLUG
  - HOLD THE PLUG IN THE EAR FOR A FEW SECONDS TO ALLOW EXPANSION



EARMUFFS

- **EARMUFFS ARE ONLY AS EFFECTIVE AS THEIR SEAL:**

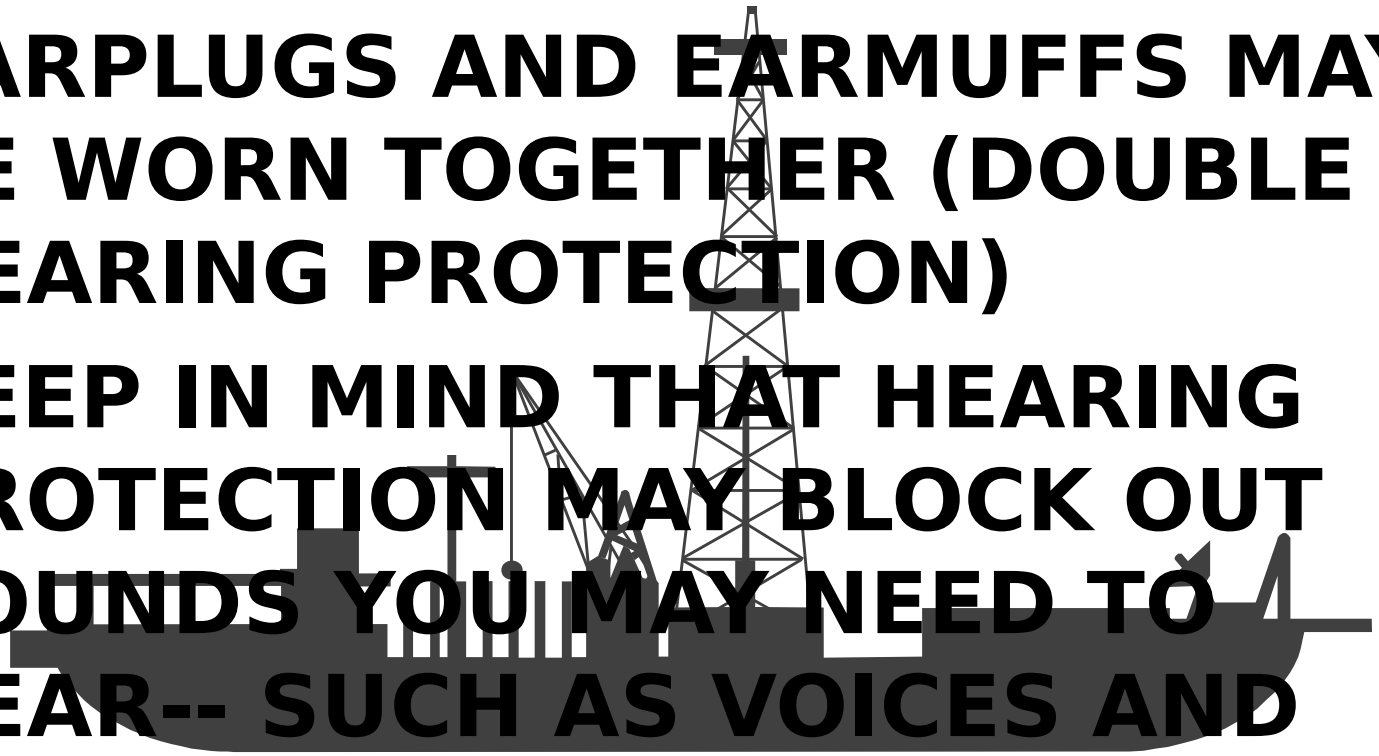
LIMITATIONS INCLUDE:

- FACIAL HAIR CAN DECREASE PROTECTION BY BREAKING THE SEAL

- WEARING EYEGLASSES AND EARRINGS CAN POSE A SIMILAR PROBLEM

PROPER PROTECTION

- TO ENSURE PROPER PROTECTION, EARPLUGS AND EARMUFFS MAY BE WORN TOGETHER (DOUBLE HEARING PROTECTION)
- KEEP IN MIND THAT HEARING PROTECTION MAY BLOCK OUT SOUNDS YOU MAY NEED TO HEAR-- SUCH AS VOICES AND ALARMS

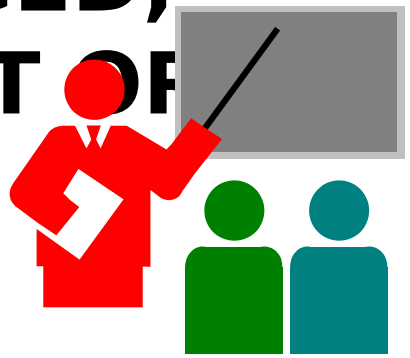


LIMITATIONS OF PPE

- EAR MUFFS WITH CRACKED, CUT OR MISSING GASKETS REDUCE YOUR PROTECTION
- DIRTY OR SCRATCHED EYEWEAR COULD LIMIT YOUR VISION
- SUSPENSION ON HARD HATS MAY HAVE LOOSEN OR TORN CRADLES
- PPE MUST FIT PROPERLY TO PROTECT YOU

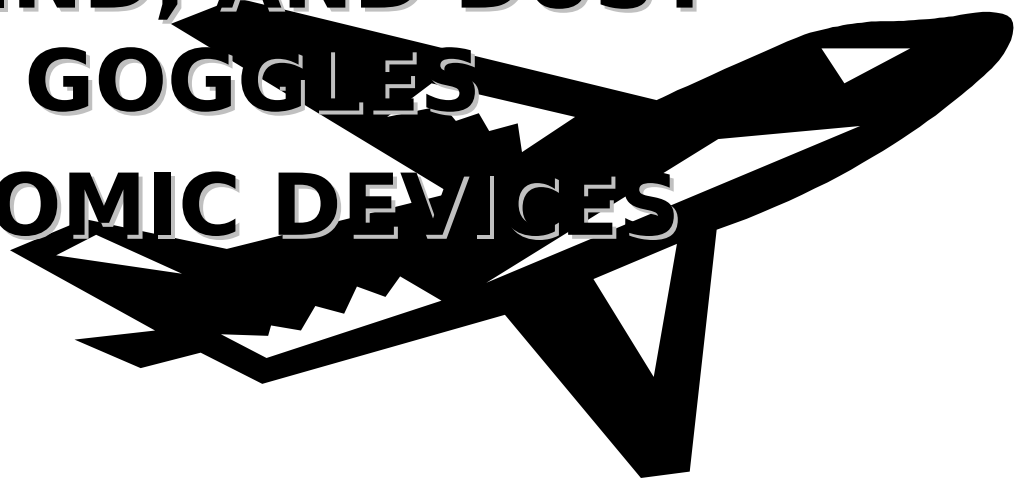
MAINTENANCE

- LEARN HOW TO CLEAN AND SANITIZE YOUR EQUIPMENT
- BE FAMILIAR WITH STORAGE AND PROPER HANDLING OF ALL PPE
- IF EQUIPMENT IS DAMAGED, KNOW HOW TO REPAIR IT OR WHEN TO REPLACE IT



MISCELLANEOUS PPE

- LIFE PRESERVERS (PFD)
- WRIST GUARDS
- SUN,WIND, AND DUST FLIGHT GOGGLES
- ERGONOMIC DEVICES



SUMMARY

- **PPE MUST BE USED CORRECTLY TO PROTECT YOU.**
- **PPE IS DESIGNED FOR YOUR BENEFIT.**
- **FOR YOUR SAKE AND FOR YOUR FAMILY'S, LEARN HOW TO USE**

SUMMARY

BUT MOST

IMPORTANTLY

USE IT!!!!!!!!